

IN THE CLAIMS:

Please cancel pending claims 1-21 and insert the following new claims:

1-21 (Canceled)

22. (New) A method for assisting a patient in self-treating diabetes, the method comprising the

steps of:

obtaining a value for a blood glucose level from a patient with a blood glucose monitor; analyzing the blood glucose value with a processor that is configured to model human metabolism, and

based on the analysis, proposing alternative choices for treating the patient based on the blood glucose level; wherein the processor contains a means for proposing the choices automatically and wherein each choice presented will result in adequate blood glucose levels.

23. (New) The method of claim 1, wherein the value of the blood glucose level is automatically, without user intervention, transmitted to the processor.

24. (New) The method of claim 2, wherein the blood glucose monitor is a continuous blood glucose monitor.

25. (New) A method for assisting a patient in self-treating diabetes, the method comprising the

steps of:

obtaining a value for a blood glucose level from a patient with a blood glucose monitor; automatically transmitting the blood glucose value to a processor that is configured to model human metabolism ,

analyzing the blood glucose value with the processor, and

based on the analysis, proposing alternative choices for treating the patient based on the blood glucose level; wherein the processor contains a means for proposing the choices automatically and wherein each choice presented will result in adequate blood glucose levels.

26. (New) The method of claim 4, wherein at least one choice is to administer a dose of insulin.

27. (New) The method of claim 5, wherein dosing information is automatically transmitted to an insulin delivery device.
28. (New) A method for assisting a patient in self-treating diabetes, the method comprising the steps of:
 - obtaining a value for a blood glucose level for a patient;
 - receiving other data relating to the patients condition;
 - modelling the patient's metabolism.
 - predicting, based on the other data and the blood glucose level, a future blood glucose level;
 - sending either a proposed self-treatment to the patient that will result in a blood glucose level within a predetermined target range, wherein the proposed treatment was automatically generated based on the modelling of the patient's metabolism or in the alternative, sending a warning to the patient when it is not possible to propose a self-treatment that will result in an acceptable blood glucose level within the predetermined target range.
29. (New) The method of claim 7, further comprising sending a warning to a medical care professional authorized by the patient to receive patient data.
30. (New) The methods of claims 1-8 , further comprising keeping track of materials and/or medications necessary to administer self-treatments and notifying the patient when supplies are being exhausted.
31. (New) The method of claim 9, wherein the notification occurs before the supplies are completely exhausted.
32. (New) The method of claim 9, wherein the supplies are selected from the group consisting of: cartridges of medication, tablets, insulin within each delivery device, test strips, needles, and lancets.
33. (New) The method of claim 10, wherein the supplies are selected from the group consisting of: cartridges of medication, tablets, insulin within each delivery device, test strips, needles, and lancets.
34. (New) An apparatus for assisting a patient in self-treating diabetes, the apparatus comprising:
 - a means for obtaining a value for a blood glucose level from a patient;

a means for analyzing the blood glucose value with a processor that is configured to model human metabolism, and

a means for, based on the analysis, proposing alternative choices for treating the patient based on the blood glucose level; wherein the processor contains a means for proposing the choices automatically and wherein each choice presented will result in adequate blood glucose levels.

35. (New) The apparatus of claim 34, wherein the blood glucose level is automatically transmitted, without user intervention, to the processor.

36. (New) The apparatus of claim 2, wherein the means for obtaining blood glucose levels comprises a continuous blood glucose monitor.

37. (New) An apparatus for assisting a patient in self-treating diabetes, the apparatus comprising:

a means for obtaining a value for a blood glucose level from a patient with a blood glucose monitor;

a means for automatically transmitting the blood glucose value to a processor;

a means for analyzing the blood glucose value with the processor, and

a means for, based on the analysis, proposing alternative choices for treating the patient based on the blood glucose level; wherein the processor contains a means for proposing the choices automatically and wherein each choice presented will result in adequate blood glucose levels.

38. (New) The apparatus of claim 4, wherein the apparatus is configured such that at least one choice is to administer a dose of insulin.

39. (New) The apparatus of claim 5, further comprising a means for automatically transmitting the dosing information to an insulin delivery device.

40. (New) An apparatus for assisting a patient in self-treating diabetes, the apparatus comprising:
 - a blood glucose monitor;
 - a means for receiving other data relating to the patients condition;
 - a means for modelling the patient's metabolism and predicting, based on the other data and the blood glucose level, a future blood glucose level;
 - a means for sending either a proposed self-treatment to the patient that will result in a blood glucose level within a predetermined target range, wherein the proposed treatment is automatically generated based on the modelling of the patient's metabolism a means for alternatively sending a warning to the patient when it is not possible to propose a self-treatment that will result in an acceptable blood glucose level within the predetermined target range.
41. (New) The apparatus of claim 7, further comprising a means for sending a warning to a medical care professional authorized by the patient to receive patient data.
42. (New) The apparatus of claims 1-8 , further comprising a stock management means for keeping track of supplies necessary to administer self-treatments and a means for notifying the patient when supplies are being exhausted.
43. (New) The apparatus of claim 9, wherein the notification occurs before the supplies are completely exhausted.
44. (New) The apparatus of claim 9, wherein the supplies are selected from the group consisting of: cartridges of medication, tablets, insulin within each delivery device, test strips, needles, and lancets.
45. (New) The apparatus of claim 10, wherein the supplies are selected from the group consisting of: cartridges of medication, tablets, insulin within each delivery device, test strips, needles, and lancets.
46. (New) A model for modelling a patient's metabolism of carbohydrates, wherein the model predicts a future blood glucose level based on a present blood glucose level and other parameters.
47. (New) The model of claim 46, wherein the model tracks a plurality of actual blood glucose levels over a period of time and other patient specific data and wherein the model,

based on a history of the data and blood glucose levels adapts to more closely mimic the patient's actual metabolism of carbohydrates.

48. (New) The model of claims 46 and 47, wherein some of the data are based on observations of diabetic patients in general and some of the data is specific to a single patient.